



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D119-646-243
Job Sheet 174817



Part No: D119-646-243

Job Qty: 1 ea

Part Name: AW119 Repl. Skidtube with Heavy Duty Wearplates, Float Compatible -Fits LH or RH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 3/22/18

Job Tracking No:

Due Date: 4/17/18

Created By: Michelle Gagnon-Donovan

Type: SOLD

Description:

Note: DWG IIN-D119-646 REV D, D3905-045 REV E SHEETS 4,5, 7-14 IPP RevA: New issue DD verified by:EC IPP REVB 12.11.05 (DEOD3905-B-1)(ecn 12-675) DD verf:JLM IPP REV:C 13.03.20 per chg003 ECN13-534 DD verf:JLM IPP REV:D 15.01.19 AS PER ECN-14-628 DD verf:JLM IPP REV:E 16.11.02 chg as per D3905 revD(CEO) DD verf:JLM IPP REV:F 17.05.19 as per dwg D3905 rev.e DD verf:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		4/14/18	0.00	0.00	Start Up Skidtubes-1		
110	Skidtubes	1 pcs		4/14/18	0.00	2.07	Skidtubes-1		
120	HandFinish	1 pcs		4/14/18	0.00	1.05	HandFinish1		
130	QC	1 pcs		4/14/18	0.00	0.00	QC7-1		
150	Skidtubes	1 pcs		4/16/18	0.00	2.07	Skidtubes-1		
155	CNC Bend Skidtubes	1 pcs		4/16/18	0.00	1.20	CNC Bend Skidtube		
165	QC	1 pcs		4/16/18	0.00	0.00	QC5		
180	Skidtubes	1 pcs		4/16/18	0.00	2.07	Skidtubes-1		
190	QC	1 pcs		4/16/18	0.00	0.00	QC5		
200	CNC Bend Skidtubes	1 pcs		4/16/18	0.00	1.20	CNC Bend Skidtube		
210	Skidtubes	1 pcs		4/16/18	0.00	1.41	Skidtubes-1		
220	QC	1 pcs		4/16/18	0.00	0.00	QC5		
224	Skidtubes	1 pcs		4/16/18	0.00	3.70	Skidtubes-1		
225	QC	1 pcs		4/16/18	0.00	0.00	QC5		
226	QC	1 pcs		4/16/18	0.00	0.00	QC10		
227	HandFinish	1 pcs		4/16/18	0.00	1.05	HandFinish2		
240	SprayPaint	1 pcs		4/16/18	0.00	0.56	Spray Paint		
245	QC	1 pcs		4/16/18	0.00	0.00	QC14		
250	HandFinish	1 pcs		4/16/18	0.00	1.05	HandFinish4		
260	QC	1 pcs		4/16/18	0.00	0.00	QC5		
270	HandFinish	1 pcs		4/16/18	0.00	1.49	HandFinish4		
280	QC	1 pcs		4/16/18	0.00	0.00	QC5		
285	HandFinish	1 pcs		4/17/18	0.00	1.05	HandFinish3		
286	QC	1 pcs		4/17/18	0.00	0.00	QC5		
288	DC	1 pcs		4/17/18	0.00	0.00	DC		
290	Packaging	1 pcs		4/17/18	0.00	0.00	Packaging3-1		
300	QC21-FG	1 Ea		4/17/18	0.00	0.00	QC21		

Part Op 110 - 1- Inspect Mat'l D2500-1-190 for damage 2- Ensure squareness of ends
Descriptions: 120 - Chemical Conversion Coat per QSI005 4.1
130 - QC7-Inspect Chemical Conversion Coat

Plex 3/22/18 8:20 AM Dart.Gagnon.Michelle

DART
AEROSPACE

Container No: S059788



Part: D119-646-243

Job No: 174817

Serial No/Batch: S059788

Revision:

Inspector:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 04/10/18

- 150 - 1- Install drill jig DT9480 drill all x-bolt spacer holes using 3/16 drill first side only. 2- 2nd side, locating from first saddle holes use DT9861 A/B to drill 2nd side fwd saddle holes. 3- 2nd side locating from fwd saddle drill remaining crossbolt spacer holes using DT9477 4- Scribe batch # inside aft end of tube
- 155 - 1- Bend AFT end of tube using CNC Bender 1 and bend prog. D3905 AFT as per dwg D3905. Must use bending Aid DT9538, located 23.25" from Aft end. 2- Ensure bending Aid DT9538 is positioned correctly, that the bender set up in on full wide and that the indexing ridge is covered with graphite grease.
- 165 - QC5- Inspect part completeness to step on W/O
- 180 - 1- Verify dimension of bend as per dwg D3905 2- Buff out marks left from bending. 3- Drill Aft Float bag holes using DT9493 as per dwg D3905 detail G and section F-F, open to finished size 4- Open x-bolt spacer holes to finished size as per dwg (sections D-D and E-E) ***DO NOT OPEN FWD SADDLE HOLES*** 5- Drill Aft wearplate and wearpad holes using DT9546 and DT9545 as per dwg D3905 detail G open to finished size 6- Deburr, blow out chips from inside of tube 7- Bond web in place as per Dwg D3905 & QSI 015. A/R Sikaflex-291 _____ Sikaflex expire date: _____ Start: _____ Time: _____ Finish: _____ Time: _____ ***** (Adhere for 12 hours)*****
- 190 - QC5- Inspect part completeness to step on W/O
- 200 - 1- Bend Fwd end of tube using bender 1 and bend prog. D3905 & Folio -04 Fwd. Use bending aid DT9544 ensure proper positioning 2- Cut Fwd end of tube as per dwg. ***VERIFY MEASUREMENT BEFORE CUTTING***
- 210 - 1- Buff out marks left from bending 2- Drill Fwd cap holes using DT8215. 3- Open Fwd saddle holes to finished size as per dwg 4- Drill Fwd x-bolt hole and open to finished size using DT9816 5- Drill 1.87" and 3.74 holes using DT10045 A&B locate from FWD saddle hole. (verify measurement) as per dwg. 6- Drill towing hole using DT10047 locate from FWD saddle hole and open to finished size. 7- C'sink FWD cap hole as per detail "C" 10- Deburr, blow out chips from inside of tube.
- 220 - QC5- Inspect part completeness to step on W/O
- 224 - NOTE: TACK IN 2 MOST FWD X-BOLT SPACERS AND TEST FIT FWD GROUND HANDLING FIXTURE, IF FIXTURE FITS WELL THEN PROCEED. FIXTURE DT10091. 1- Countersink x-bolt holes as per dwg 2- Remove alodine prepare for welding 3- Insert x-bolt spacers 4- Weld x-bolt spacer as per dwg A/R Alum rod Batch: 030611 5- Grind welds flush as per dwg 6- Counter bore x-bolt holes as per dwg 7- Deburr 8- Pick D2855-5 cap and transfer drill missing hole. Deburr and identify cap with skid tube batch#.
- 225 - QC5- Inspect part completeness to step on W/O TEST FIT USING FIXTURE DT10091.
- 226 - QC10- Inspect visual per QSI004- ground welds
- 227 - Pressure Wash per QSI005 4.3
- 240 - Spray Painting per QSI005 4.2 *****AS PER DEO DETAIL "F" NOTE 8, SHEET 8 MASK THIS AREA, DO NOT APPLY PRIMER OR PAINT***** PRIME AS PER DWG AND QSI 005 4.2 BATCH: _____ PAINT WHITE AS PER DWG AND QSI 005 4.2 BATCH: _____
- 245 - QC14- Inspect Spray Paint
- 250 - Assemble as per dwg 1- Install inserts as per Dwg D3905.
- 260 - QC5- Inspect part completeness to step on W/O
- 270 - 1- Install wearpads, gaskets and wearplates as per Dwg D3905. Put sikaflex in insert before installing bolts and washers A/R Sikaflex-240/-291 14134782 Sikaflex expire date: 18101 2- Install plugs assembly as per dwg. 3- Inspect for foreign objects as per QSI 024 4- Install D2855-3 Cap and seal with Sikaflex. Clean excess adhesive. A/R Sikaflex-240/-291 14134782 Sikaflex expire date: 18101 5- Install insert in D2855- Cap. Install cap and seal with Sikaflex. Clean excess adhesive. A/R Sikaflex-240/-291 14134782 Sikaflex expire date: 18101 6- Install (2) D5101-041 and (1) D5101-047 as per dwg by using DT10117
- 280 - QC5- Inspect part completeness to step on W/O
- 285 - Wing Walk as per dwg QSI005 4.4 Batch _____
- 286 - QC5- Inspect part completeness to step on W/O
- 288 - Document Control Photocopy bluefile & type labels per PPP D119-646-243 CHG 005
- 290 - Identify as per dwg & Stock Location: _____
- 300 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2500-1-190	Ext'n -'I' Beam Tube 4"	1 Ea (1 ea)	90-Start up Operation	159717
D3681-1	Spacer	8 Ea (8 ea)	90-Start up Operation	5022530
D3903-1	Spacer	12 Ea (12 ea)	90-Start up Operation	502093
D2579	Crossbolt Spacer	2 Ea (2 ea)	224-Skidtubes	5040524
D2855-5	Cap	1 Ea (1 ea)	224-Skidtubes	5016939
ALS4-1032-130	Rivnut	10 Ea (10 ea)	250-HandFinish	5059788
ALS4-1032-225	Rivnut	1 Ea (1 ea)	270-HandFinish	5008959
AN3C46A	Bolt	4 Ea (4 ea)	270-HandFinish	5034386
AN3C50A	Bolt	4 Ea (4 ea)	270-HandFinish	5041155
AN3C5A	Bolt	12 Ea (12 ea)	270-HandFinish	5019395
AN4C46A	Bolt	3 Ea (3 ea)	270-HandFinish	5057153
D2855-3	Cap	1 Ea (1 ea)	270-HandFinish	5006307
D3411-3	Washer	16 Ea (16 ea)	270-HandFinish	F153291
D3672-1	Washer, Phenolic	2 Ea (2 ea)	270-HandFinish	F150071
D3847-1	Wearpad	1 Ea (1 ea)	270-HandFinish	5036137
D3847-11	Wearpad	1 Ea (1 ea)	270-HandFinish	5026852
D3849-045	Run-on Landing Wearplate Aft For Float Skidtubes	1 Ea (1 ea)	270-HandFinish	F154851
D3849-047	Run-on Landing Wearplate Fwd For Float Skidtubes	1 Ea (1 ea)	270-HandFinish	F154850
D3904-1	Washer	16 Ea (16 ea)	270-HandFinish	5046777
D5101-041	Crossbolt Spacer Assembly	2 Ea (2 ea)	270-HandFinish	F143449
D5101-047	Crossbolt Spacer Assembly	1 Ea (1 ea)	270-HandFinish	5000833
D5101-3	Insert	6 Ea (6 ea)	270-HandFinish	F158939
D5101-5	Insert	6 Ea (6 ea)	270-HandFinish	F158796
MS21043-3	Nut	8 Ea (8 ea)	270-HandFinish	5038086
MS21043-4	Nut	3 Ea (3 ea)	270-HandFinish	F11137951
MS24694-C52	Screw	2 Ea (2 ea)	270-HandFinish	5041238
NAS1149C0332R	Washer	8 Ea (8 ea)	270-HandFinish	
NAS1149D0416J	Washer	3 Ea (3 ea)	270-HandFinish	F11131511
D3885-3	web	1 ea	180 skid tube	5000623

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D2500-1-190	1	93	0
	D3681-1	8	248	0
	D3903-1	12	37	0
224-Skidtubes	D2579	2	89	0
	D2855-5	1	94	0
250-HandFinish	ALS4-1032-130	10	7,007	0
270-HandFinish	ALS4-1032-225	1	1,149	0
	AN3C46A	4	209	0
	AN3C50A	4	124	0
	AN3C5A	12	191	0
	AN4C46A	3	194	0
	D2855-3	1	10	0
	D3411-3	16	56	0
	D3672-1	2	1,073	0
	D3847-1	1	28	0
	D3847-11	1	19	0
	D3849-045	1	2	0
	D3849-047	1	5	0
	D3904-1	16	79	0
	D5101-041	2	18	0
	D5101-047	1	2	0
	D5101-3	6	68	0
	D5101-5	6	54	0
	MS21043-3	8	959	0
	MS21043-4	3	652	0
	MS24694-C52	2	63	0
	NAS1149C0332R	8	4,898	0
	NAS1149D0416J	3	3,212	0

180 skid tubes

D3885-3

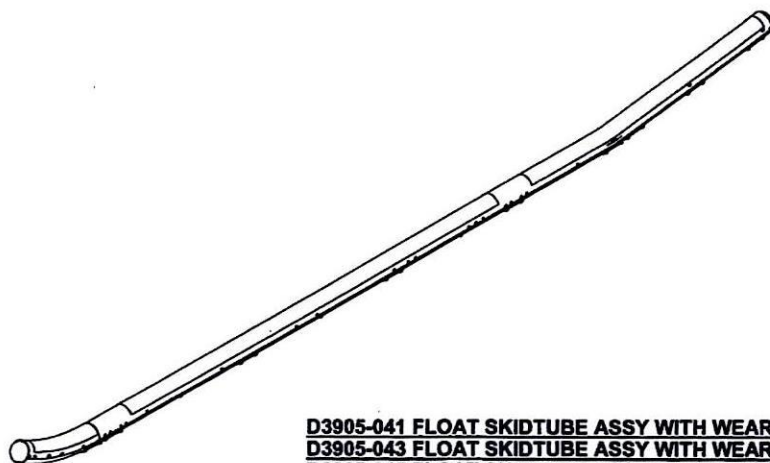
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Part Specifications

Specifications could not be found.

Plex 3/22/18 8:20 AM Dart.Gagnon.Michelle



D3905-041 FLOAT SKIDTUBE ASSY WITH WEARPAD (SHOWN)
D3905-043 FLOAT SKIDTUBE ASSY WITH WEARPLATE (SIMILAR)
D3905-045 FLOAT SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)

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WITHOUT NOTICE
WORK ORDER

NO. 174817

MAR 21 2018

E	COMPLETE REDRAW SEE PREVIOUS REV. AFT FLOAT HOLE NOW Ø0.485 WAS Ø0.437 FINISH REMOVED FROM SADDLE AREA SEE DETAIL F. REF PART15-421 CHANGE QTY OF D2855-3, ADDED D2855-5 CAP ASSEMBLIES. ADDED INSTRUCTIONS TO LOCATE INSERT HOLE FOR D2855-5 CAP. REF PART17-583 ADDED DRILL JIG REF NUMBER. NCR15-5366 INCREASE RIDGE RELIEF FROM 0.060 TO 0.130. REF PART17-574			AJS / WK	17.03.13
D	REVISED DIMENSIONS AND PROVIDED TOLERANCE TO SKIDTUBE OVERALL LENGTH PAGE 5-6 REVISED NOTE 2 AND NOTE 7 PAGE 1 (ZN B8-, ZN A8-1) REVISED -041/-043/-045 DRAWING VIEWS. REVISED SECTION VIEW F-F (ZN B4-7). REVISED BOM REF. PART13-289 AND PART13-272			AK	14.08.08
C	(SHT 1 PL. ZN C2-2, C2-3, C2-4) ITEM 13, QTY 2 WAS 4. ITEM 42 AND 45, QTY 44 WAS 46. ADD ITEM 49, MS24694- CS2 WAS AN3CSA, D3872-1 AND NAS1149C0332R, (ZN C7-7) Ø0.201 CSK Ø0.385 X 100" WAS Ø0.204 THRU, (ZN A4-5, A4-6) ADD RELIEF INSTRUCTION, ADD ITEM 10, CROSS BOLT SPACER (ZN D4-1, C8-7, D8-7)			DB	13.02.21
B	REVISED PART LIST, ALS4-1032-130 WAS AELS-1032-130 (ZN A8-5, A8-6, C5-7, C3-7, A5-7); ADD DT88932 (ZN A8-1); D2855-3 WAS D2875 (ZN C8-2, C1-2, C8-3, C1-3, C8-4, C1-4); AN3CSA WAS AN3CSA (ZN C7-2, C1-2, C7-3, C1-3, C7-4, C1-4); D3849-047 WAS D3849-041 (ZN B3-4); ADD D3411-3 (ZN B3-4); ADD AN3CS0A (ZN B3-4); Ø0.313 WAS Ø0.328 (B2-5, B2-6, C2-7, A8-7 & D7-8), REVISED NOTE iv (ZN A8-7)			RF	09.06.30
A	NEW ISSUE			RF	09.03.30
REV.	DESCRIPTION			BY	DATE
DESIGN AJS DART AEROSPACE USA, INC.					
DRAWN WK EUGENE, OR					
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MFG. APPR.	DD	D3905		SHEET 1 OF 14	
APPROVED	HS	TITLE		SCALE	
DE APPR.	DS	A119 FLOAT SKIDTUBE ASSY		NTS	
DATE	17.03.13				
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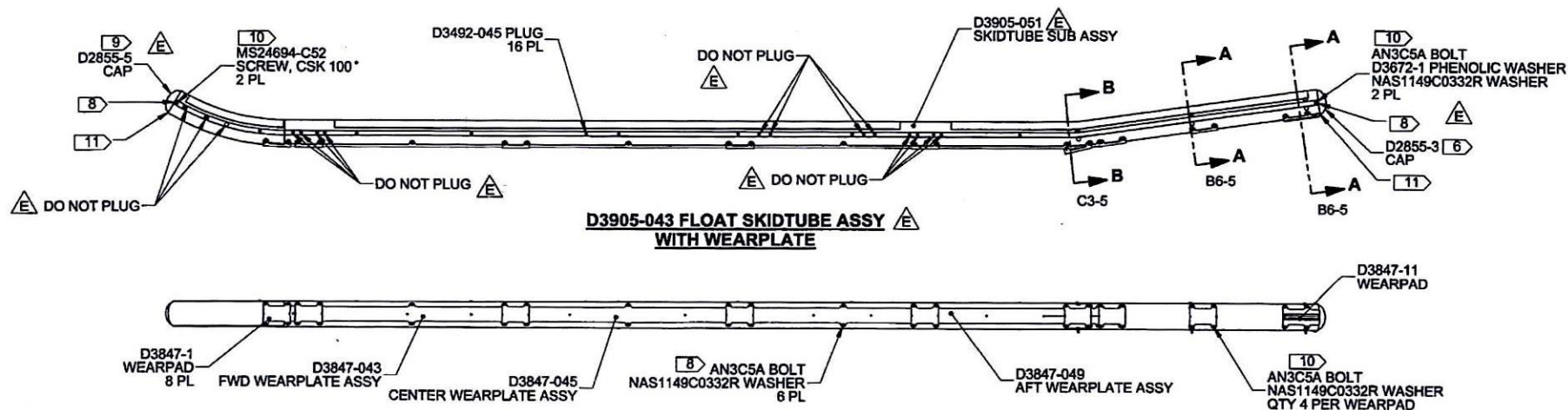
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ITEM	QTY -043	P/N	DESCRIPTION
	X	D3905-043	FLOAT SKIDTUBE ASSY
1	1	D2855-3	CAP
2	1	D2855-5	CAP
3	16	D3492-045	PLUG
4	2	D3672-1	PHENOLIC WASHER
5	1	D3847-043	FWD WEARPLATE ASSY
6	1	D3847-045	CENTER WEARPLATE ASSY
7	1	D3847-049	AFT WEARPLATE ASSY
8	8	D3847-1	WEARPAD
9	1	D3847-11	WEARPAD
10	1	D3905-051	SKIDTUBE SUB ASSEMBLY
11	2	D5101-041	CROSSBOLT SPACER ASSY
12	1	D5101-047	CROSSBOLT SPACER ASSY
13	6	D5101-3	INSERT
14	6	D5101-5	INSERT

ITEM	QTY -043	P/N	DESCRIPTION
15	1	ALS4-1032-225	INSERT
16	44	AN3C5A	BOLT
17	3	AN4C46A	BOLT
18	3	MS21043-4	NUT, SELF-LOCKING
19	2	MS24694-C52	SCREW, CSK 100*
20	44	NAS1149C0332R	WASHER
21	6	NAS1149C0416R	WASHER



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3905-043" AND BATCH NUMBER PER QSI 044 6.4 ON THE ID OF THE TUBE, BEFORE INSTALLING THE AFT D2855-3 CAP
- 7) WEIGHT: 42.8 lbs
- 8) RELIEVE INNER RIDGE OF EXTRUSION, AS NEEDED, TO ALLOW FOR INSTALLATION OF D2855-3 AND D2855-5 CAP ASSY, ALODINE BARE MATERIAL
- 9) USE D3905-051 SKIDTUBE ASSY TO LOCATE AND BACKDRILL UNDRILLED INSERT HOLE INTO D2855-5 CAP, OPEN HOLE TO $\varnothing 0.297$, ALODINE BARE MATERIAL AND INSTALL ALS4-1032-225 (OR AKS7-1032-225, OR ALS7-1032-225, OR AKS4-1032-225) INSERT ON INSIDE OF CAP.
- 10) SEAL FASTENERS WITH SIKAFLEX -241/291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT
- 11) SEAL MATING SURFACES WITH SIKAFLEX -241/291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT

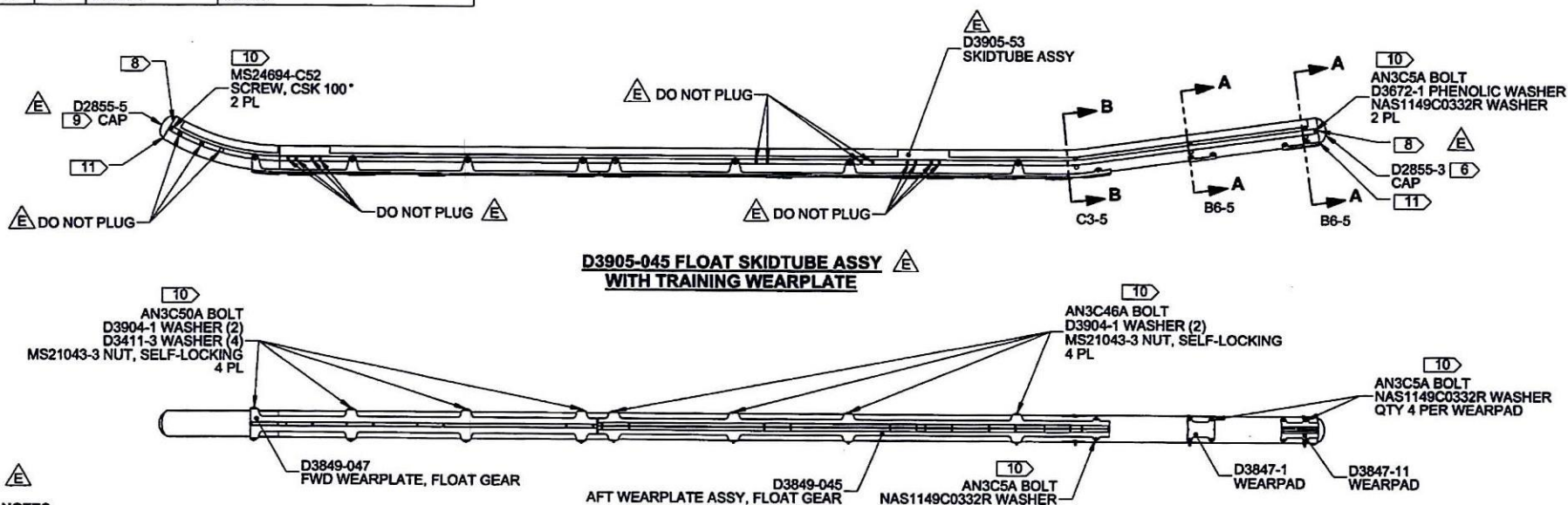
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ITEM	QTY	P/N	DESCRIPTION
	X	D3905-045	FLOAT SKIDTUBE ASSY
1	1	D2855-3	CAP
2	1	D2855-5	CAP
3	16	D3411-3	WASHER
4	2	D3672-1	PHENOLIC WASHER
5	1	D3847-1	WEARPAD
6	1	D3847-11	WEARPAD
7	1	D3849-045	AFT WEARPLATE ASSY, FLOAT GEAR
8	1	D3849-047	FWD WEARPLATE, FLOAT GEAR
9	16	D3904-1	WASHER
10	1	D3905-053	SKIDTUBE SUB ASSEMBLY
11	2	D5101-041	CROSSBOLT SPACER ASSY
12	1	D5101-047	CROSS BOLT SPACER
13	6	D5101-3	INSERT
14	6	D5101-5	INSERT

ITEM	QTY	P/N	DESCRIPTION
15	1	ALS4-1032-225	INSERT
16	12	AN3C5A	BOLT
17	4	AN3C46A	BOLT
18	4	AN3C50A	BOLT
19	3	AN4C46A	BOLT
20	8	MS21043-3	NUT, SELF-LOCKING
21	3	MS21043-4	NUT, SELF-LOCKING
22	2	MS24694-C52	SCREW, CSK 100°
15	12	NAS1149C0332R	WASHER
24	6	NAS1149D0416J	WASHER



**D3905-045 FLOAT SKIDTUBE ASSY
WITH TRAINING WEARPLATE**

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3905-045" AND BATCH NUMBER PER QSI 044 6.4 ON THE ID OF THE TUBE, BEFORE INSTALLING THE AFT D2855-3 CAP
- 7) WEIGHT: 48.0 lbs
- 8) RELIEVE INNER RIDGE OF EXTRUSION, AS NEEDED, TO ALLOW FOR INSTALLATION OF D2855-3 AND D2855-5 CAP ASSY. ALODINE BARE MATERIAL
- 9) USE D3905-053 SKIDTUBE ASSY TO LOCATE AND BACKDRILL UNDRILLED INSERT HOLE INTO D2855-5 CAP. OPEN HOLE TO $\varnothing 0.297$. ALODINE BARE MATERIAL AND INSTALL ALS4-1032-225 (OR AKS7-1032-225, OR ALS7-1032-225, OR AKS4-1032-225) INSERT ON INSIDE OF CAP.
- 10) SEAL FASTENERS WITH SIKAFLEX -241/291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT
- 11) SEAL MATING SURFACES WITH SIKAFLEX -241/291 OR PROSEAL 890 OR MIL-S-8802 CLASS B2 SEALANT

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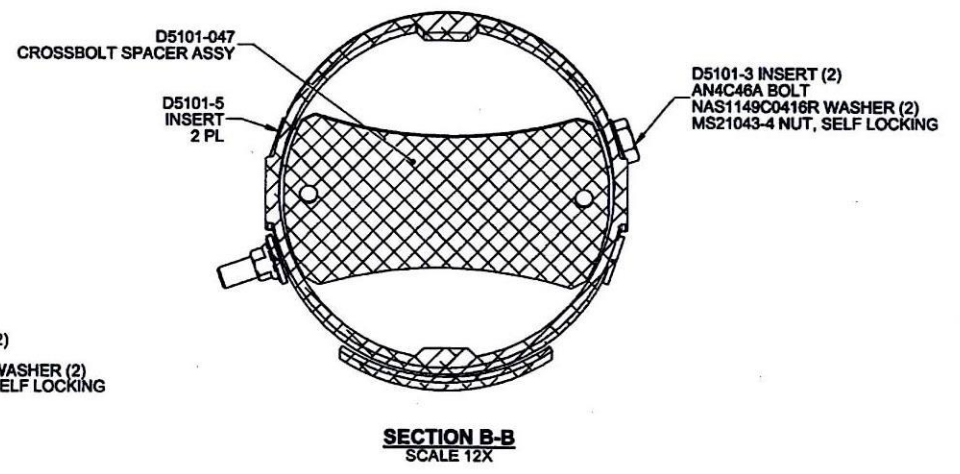
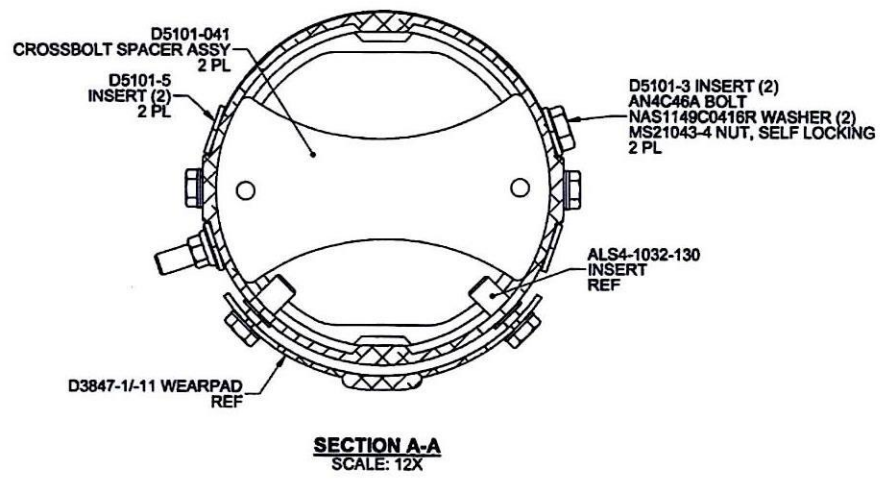
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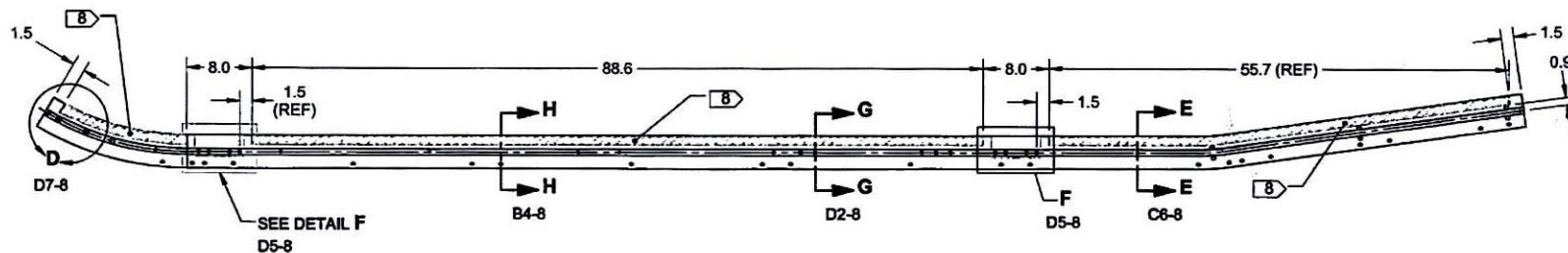
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DE APPR.	DS	A119 FLOAT SKIDTUBE ASSY	NTS
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8 7 6 5 4 3 2 1

ITEM	QTY	P/N	DESCRIPTION
	X	D3905-051	SKIDTUBE SUB ASSY
1	2	D2579	CROSS BOLT SPACER
2	8	D3681-1	SPACER
3	12	D3903-1	SPACER
4	1	D3905-061	SKIDTUBE SUB ASSEMBLY
5	42	ALS4-1032-130	INSERT



D3905-051 SKIDTUBE SUB ASSEMBLY

NOTES:

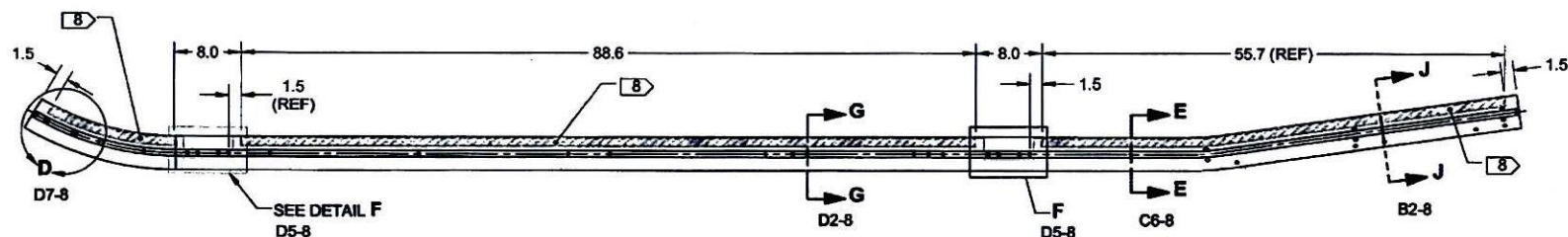
- 1) MATERIAL: N/A
- 2) FINISH: PRIME (REF 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2.2.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY AT NEXT ASSEMBLY
- 7) WEIGHT: N/A
- 8) AFTER APPLICATION OF FINISH, PAINT TOP SURFACE OF SKIDTUBE WITH MIL-W-5044 ANTI-SKID PAINT (WING WALK) AS INDICATED TO 0.50" ABOVE LOCATION RIDGE, PER QSI 005 SECTION 4.4

RELEASED
2017-05-08

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CHECKED	VS	DRAWING NO.	REV. E
MFG. APPR.	DD	D3905	SHEET 6 OF 14
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ITEM	QTY	P/N	DESCRIPTION
	X	D3905-053	SKIDTUBE SUB ASSY
1	2	D2579	CROSS BOLT SPACER
2	8	D3681-1	SPACER
3	12	D3903-1	SPACER
4	1	D3905-063	SKIDTUBE SUB ASSEMBLY
5	10	ALS4-1032-130	INSERT



D3905-053 SKIDTUBE SUB ASSEMBLY

NOTES:

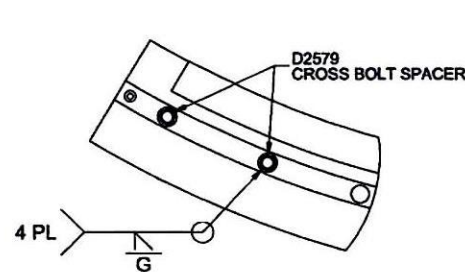
- 1) MATERIAL: N/A
- 2) FINISH: PRIME (REF 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2.2.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY AT NEXT ASSEMBLY
- 7) WEIGHT: N/A
- 8) AFTER APPLICATION OF FINISH, PAINT TOP SURFACE OF SKIDTUBE WITH MIL-W-5044 ANTI-SKID PAINT (WING WALK) AS INDICATED TO 0.50" ABOVE LOCATION RIDGE, PER QSI 005 SECTION 4.4

RELEASED
2017-05-08

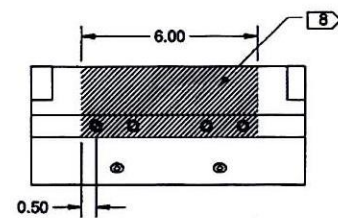
APPROVED

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CHECKED	VS	DRAWING NO.	REV. E
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APPROVED	HS	TITLE	SCALE
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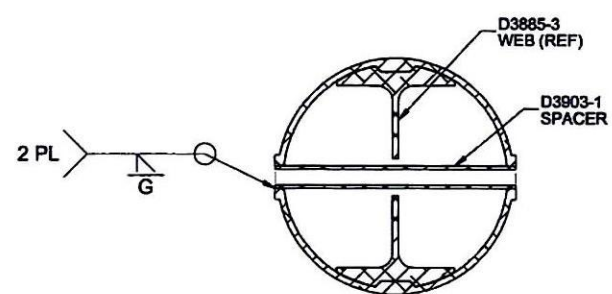
8 7 6 5 4 3 2 1



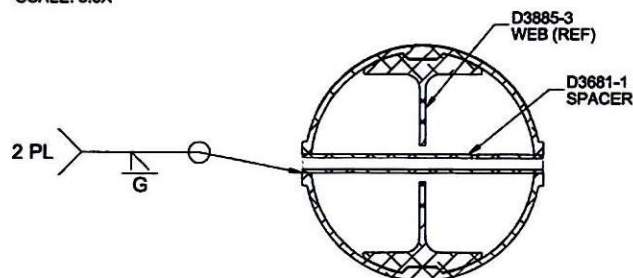
DETAIL D
SCALE: 3.5X



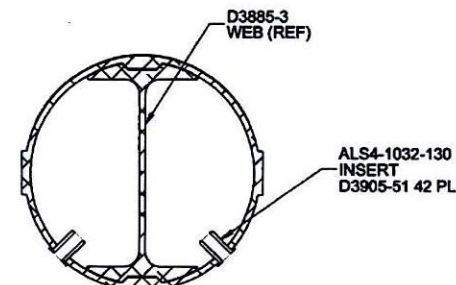
DETAIL F
SCALE: 3.5X



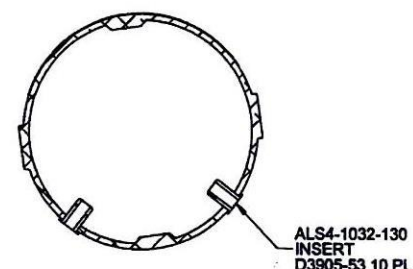
SECTION G-G
SCALE: 7X
12 PL



SECTION E-E
SCALE: 7X
8 PL



SECTION H-H
SCALE: 7X
D3905-51 21 PL



SECTION J-J
SCALE: 7X
D3905-53 5 PL

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: PRIME (REF 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2.2.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AT FINAL ASSEMBLY
- 7) WEIGHT: N/A
- 8) MASK THIS AREA AND DO NOT APPLY PRIMER OR PAINT
- 9) AFTER DRILLING AND BENDING ASSEMBLY, PERFORM THE FOLLOWING FOR THE SECTION G-G $\phi 0.375$ HOLES ONLY:
 - i) CHAMFER HOLES $\phi 0.475 \times 45^\circ$
 - ii) INSERT D3903-1 SPACER
 - iii) WELD INTO PLACE AND GRIND FLUSH
 - iv) C'BORE TO $\phi 0.313 \times 0.75$ DEEP
 - v) DEBURR HOLES
- 10) AFTER DRILLING AND BENDING ASSEMBLY, PERFORM THE FOLLOWING FOR THE SECTION E-E $\phi 0.313$ HOLES ONLY:
 - i) CHAMFER HOLES $\phi 0.354 \times 45^\circ$ OR 0.050 DEEP $\times 45^\circ$ (BOTH SIDES)
 - ii) INSERT D3681-1 SPACER
 - iii) WELD INTO PLACE AND GRIND FLUSH
 - iv) DEBURR HOLES
- 11) WELD PER DART QSI 004

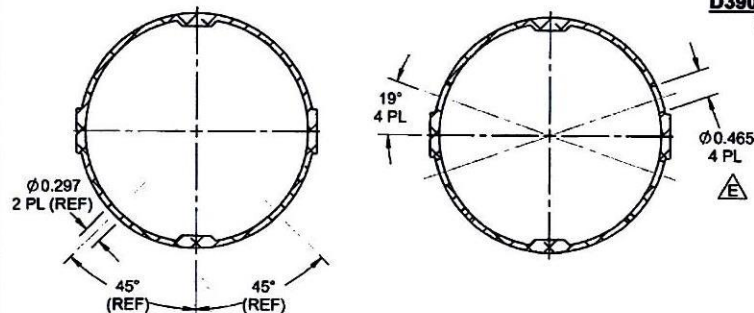
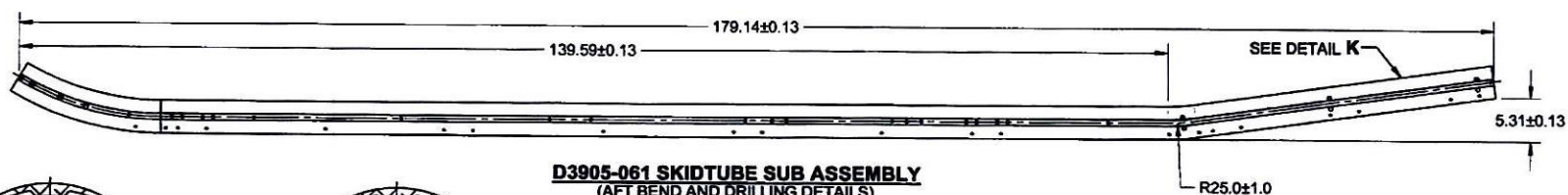
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2017-05-08

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MFG. APPR.	DD	D3905	SHEET 8 OF 14
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DE APPR.	D9	A119 FLOAT SKIDTUBE ASSY	NTS
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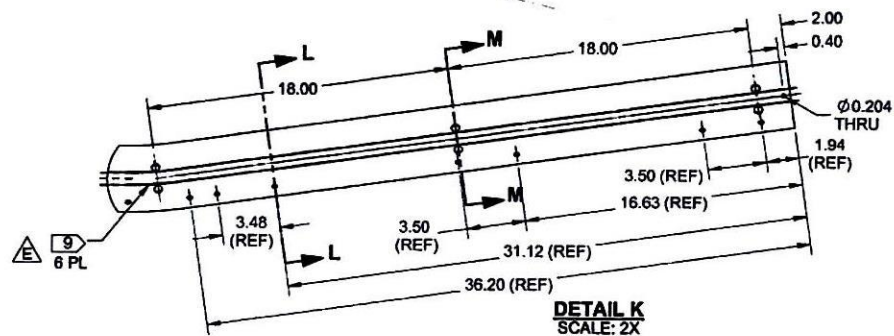
8 7 6 5 4 3 2 1

ITEM	QTY -061	P/N	DESCRIPTION
		D3905-061	SKIDTUBE SUB ASSEMBLY
1	1	D3885-3	FLOAT WEB
2	1	D3905-11	SKIDTUBE



SECTION L-L
7 PL
SCALE: 7X

SECTION M-M
3 PL
SCALE: 7X



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AT FINAL ASSEMBLY
- 7) WEIGHT: N/A
- 8) INSERT D3885-3 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 AFTER BENDING. ENSURE HOLES LINE-UP
- 9) RELIEVE RIDGE FLUSH WITH SKIDTUBE FOR INSERT CLEARANCE, MAX 0.130 INTO RIDGE

RELEASED
2017-05-08

APPROVED

DESIGN	AJS
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CHECKED	VS
MFG. APPR.	DD
APPROVED	HS
DE APPR.	DS
DATE	17.03.13

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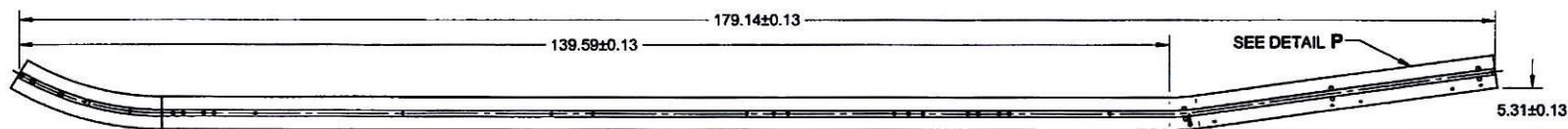
DRAWING NO.
D3905
REV. E
SHEET 9 OF 14
TITLE
A119 FLOAT SKIDTUBE ASSY
SCALE
NTS

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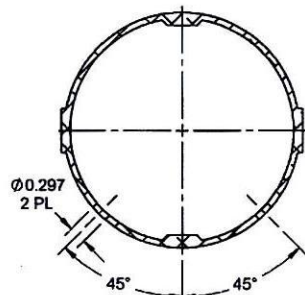
ITEM	QTY -063	P/N	DESCRIPTION
	X	D3905-063	SKIDTUBE SUB ASSEMBLY
1	1	D3885-3	FLOAT WEB
2	1	D3905-13	SKIDTUBE



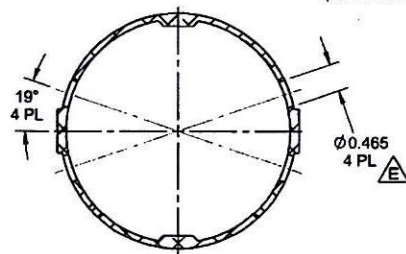
D3905-063 SKIDTUBE SUB ASSEMBLY
(WEB/TUBE ASSEMBLY PRIOR TO AFT BEND)



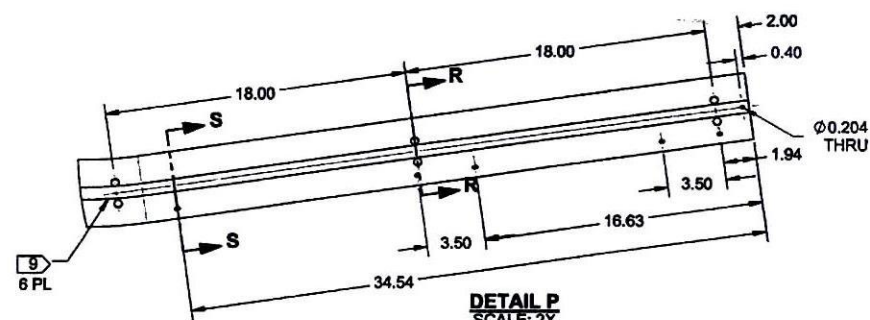
D3905-063 SKIDTUBE SUB ASSEMBLY
(AFT BEND AND DRILLING DETAILS)



SECTION S-S
5 PL
SCALE: 7X



SECTION R-R
3 PL
SCALE: 7X



DETAIL P
SCALE: 2X

NOTES:

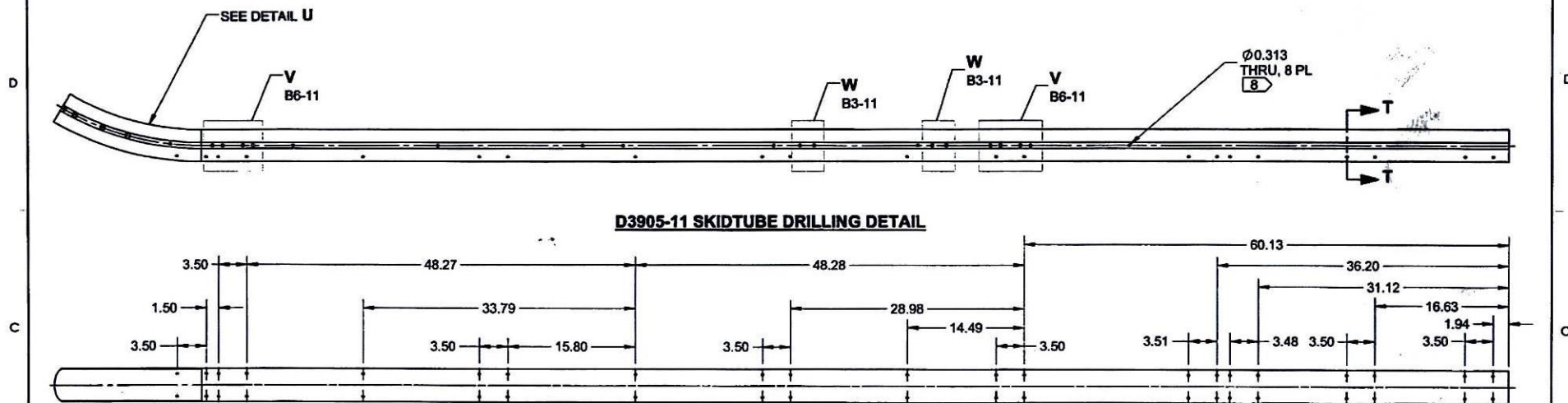
- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AT FINAL ASSEMBLY
- 7) WEIGHT: N/A
- 8) INSERT D3885-3 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING. ENSURE HOLES LINE-UP
- 9) RELIEVE RIDGE FLUSH WITH SKIDTUBE FOR INSERT CLEARANCE, MAX 0.130 INTO RIDGE

RELEASED
2017-05-08

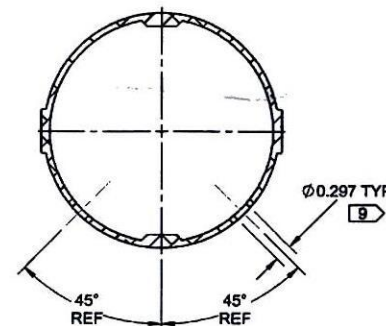
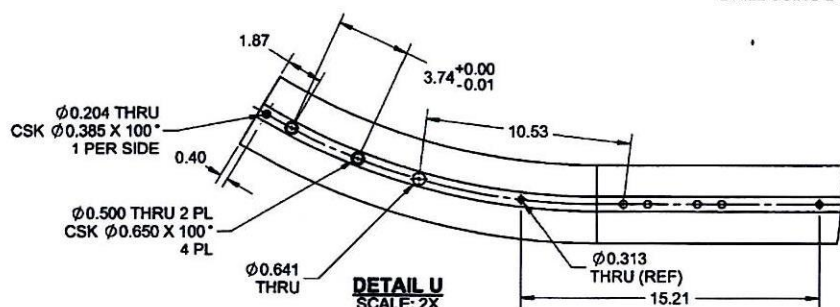
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MFG. APPR.	DD	D3905	SHEET 10 OF 14
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8 7 6 5 4 3 2 1



WEARPAD/WEARPLATE HOLE PATTERN
FOR REFERENCE ONLY
DRILL USING DT9613/DT9545 TEMPLATE



SECTION T-T
SCALE: 2X
21 PL



NOTES:

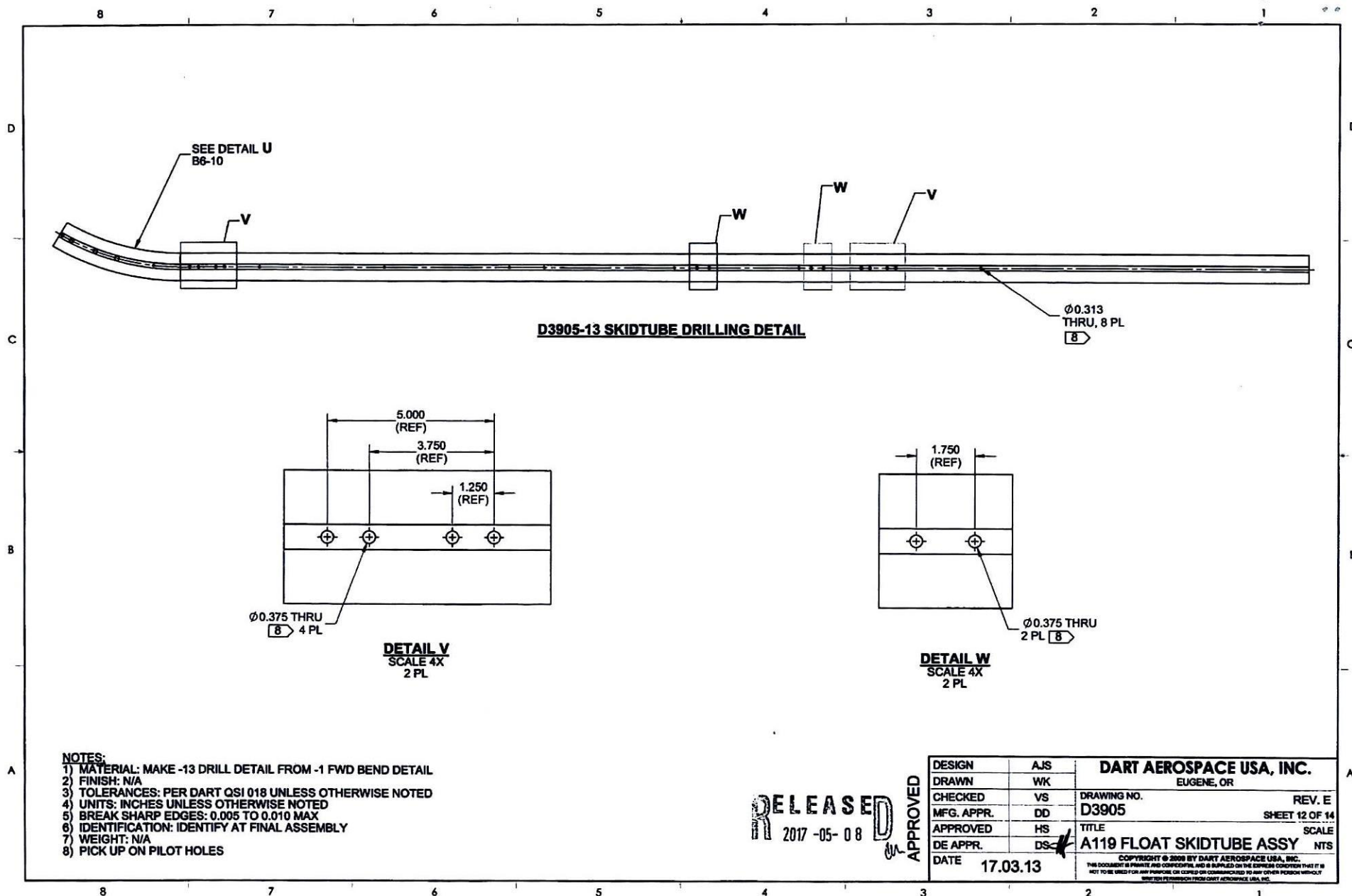
- 1) MATERIAL: MAKE -11 DRILL DETAIL FROM -1 FWD BEND DETAIL
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AT FINAL ASSEMBLY
- 7) WEIGHT: N/A
- 8) PICK UP ON PILOT HOLES
- 9) USE DART DRILL TEMPLATE DT9613/DT9545 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARPAD/WEARPLATE INSERTS.

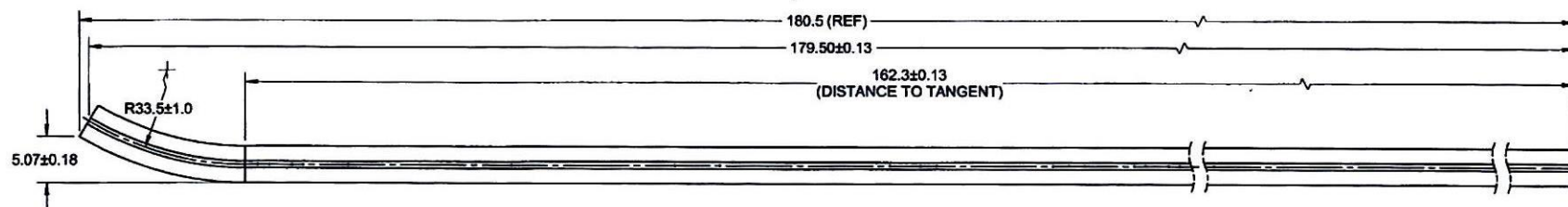
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2017-05-08

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MFG. APPR.	DD	D3905	SHEET 11 OF 14
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8 7 6 5 4 3 2 1





D3905-1 SKIDTUBE FWD BEND DETAIL

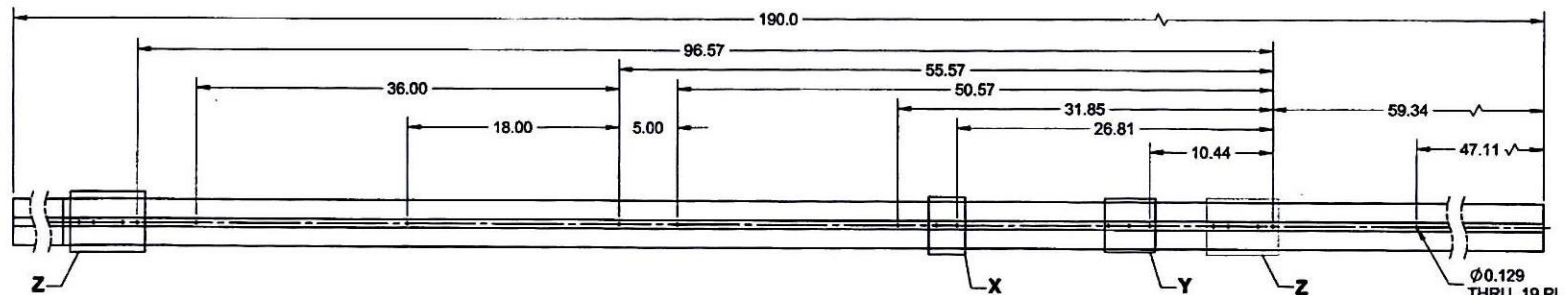
NOTES:

- 1) MATERIAL: MAKE -1 FWD BEND DETAIL FROM -3 PILOT HOLE DETAIL
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AT FINAL ASSEMBLY
- 7) WEIGHT: N/A
- 8) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.

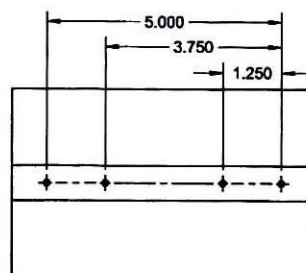
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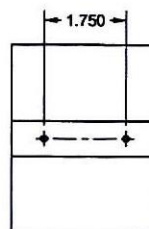
DESIGN	AJS	DART AEROSPACE USA, INC.	
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MFG. APPR.	DD	D3905	SHEET 13 OF 14
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DE APPR.	DS	A119 FLOAT SKIDTUBE ASSY	NTS
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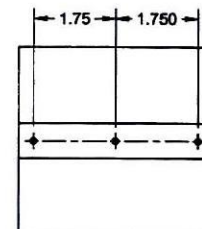
D3905-3 SKIDTUBE PILOT HOLE DETAIL



DETAIL Z
SCALE: 4X



DETAIL X
SCALE: 4X



DETAIL Y
SCALE: 4X

NOTES:

- 1) MATERIAL: MAKE FROM D2500-1-190 EXTRUSION
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AT FINAL ASSEMBLY
- 7) WEIGHT: N/A

RELEASED
2017-05-08

APPROVED

DESIGN	AJS
DRAWN	WK
CHECKED	VS
MFG. APPR.	DD
APPROVED	HS
DE APPR.	DS
DATE	17.03.13

DART AEROSPACE USA, INC.
EUGENE, OR

DRAWING NO. **D3905** REV. E
SHEET 14 OF 14
TITLE **A119 FLOAT SKIDTUBE ASSY** SCALE NTS

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Traveller Change Request

Part#: D119-646-243

Job#: 174817

Name Jessey Young

Date 4/20/2018

Workcenter 180 Skid tubes

Operation # 180

Issue: Quality ☐

Wrong Routing ☐

Op Description ☐

Missing Information ☒

Material ☒

Other ☐

DAS
10
9-89

Change requested: Web 3885-3 Not in Job BOM
or Job allocations, web should be at
step 180 of skid tubes I workcenter.

Name _____

Date _____

Workcenter | _____

Operation # _____

Issue: Quality ☐

Wrong Routing ☐

Op Description ☐

Missing Information ☐

Material ☐

Other ☐

Name _____

Date _____

Workcenter _____

Operation # _____

Issue: Quality ☐

Wrong Routing ☐

Op Description ☐

Missing Information ☐

Material ☐

Other ☐

Change requested: _____



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO039704

Supplier: ATE003-VC
Atelier Debosselage
358 Principale
Calumet
QC
J0V 1B0 Canada
Phone: 819 242 5633

PO No: PO039704
PO Date: 4/25/18
Due Date:
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Lavoie, Chantal
Phone: clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	175480	D3391-023	Mid Tube Assembly	Firmed		1 pcs	0 pcs	1 pcs	\$125.00/pcs	\$125.00
	175479			Firmed		1 pcs	0 pcs	1 pcs	\$125.00/pcs	\$125.00
	175481			Firmed	4/25/18	1 pcs	0 pcs	1 pcs	\$125.00/pcs	\$125.00
Sub Total:						3	0	3		\$375.00
2	174835	D350-636-011	Skidtube LH, Std Wearplates, DART (Apical) Cylindrical/Aerazur Float Comp.	Firmed		1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
	175229			Firmed		1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
Sub Total:						2	0	2		\$450.00
3	174817	D119-646-243	AW119 Repl. Skidtube with Heavy Duty Wearplates, Float Compatible - Fits LH or RH	Firmed		1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
	175231			Firmed		1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
Sub Total:						2	0	2		\$450.00
Grand Total:									\$1,275.00	

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 4/25/18 10:41 AM dart.lavoie.chantal